

We claim:

1. A process for simultaneously extracting at least a first and a second natural organic component from organic material, comprising the steps of:

- (a) contacting the organic material in a vessel with a blend of solvents to simultaneously extract the natural organic components into the solvent blend;
- 5 (b) removing the remaining organic material from the solution of the natural organic components and the solvent blend; and
- (c) removing the solvent blend to isolate the products, containing the first and second natural organic components.

2. The process of claim 1, wherein the blend of solvents contains at least one C1-C3 HFC and at least one organic solvent.

3. The process of claim 2, wherein the HFC is tetrafluoroethane.

4. The process of claim 3, wherein the organic solvent is selected from the group consisting of acetone, methanol, butane, and hexane.

5. The process of claim 3, wherein the solvent blend comprises from between about 60% to about 95% tetrafluoroethane.

6. The process of claim 5, wherein the solvent blend comprises tetrafluoroethane and at least two organic solvents.

7. The process of claim 6, wherein the organic solvents are selected from the group including acetone, methanol, butane, and hexane.
8. The process of claim 7, wherein the solvent blend comprises between about 70% and about 85% tetrafluoroethane, between about 1% and about 25% acetone, and between about 1% and about 25% methanol.
9. The process of claim 5, wherein the solvent blend comprises between about 70% and about 95% tetrafluoroethane and the organic solvent is acetone.
10. The process of claim 5, wherein the solvent blend comprises between about 70% and about 90% tetrafluoroethane and the organic solvent is methanol.
11. The process of claim 5, wherein the solvent blend comprises between about 70% and about 90% tetrafluoroethane and the organic solvent is hexane.
12. The process of claim 1, wherein the first natural organic component comprises an antioxidant.
13. The process of claim 12, wherein the first natural organic component comprises organic molecules having polarity comparable to antioxidants.

14. The process of claim 1, wherein the second natural organic component comprises essential oils.

15. The process of claim 3, wherein the step of removing the solvent blend comprises the steps of:

- (a) evaporating the tetrafluoroethane,
- (b) evaporating the organic solvent(s), and
- (c) distilling the organic solvent(s).

16. The process of claim 15, wherein the step of evaporating the tetrafluoroethane is accomplished via thin film evaporation.

17. The process of claim 15, wherein the step of evaporating the organic solvent(s) is accomplished via wipe film evaporation.

18. The process of claim 15, wherein the step of distilling the organic solvent(s) is accomplished via column distillation.

19. A process for extracting molecules having polarity comparable to antioxidants and essential oils from botanical material, comprising the steps of:

- (a) contacting the botanical material in a vessel with a blend of tetrafluoroethane and at least one organic solvent to simultaneously dissolve the molecules and the essential oils in the solvent blend;

- (b) removing the remaining botanical material from the solution of the molecules, the essential oils, and the solvent blend; and
- (c) removing the solvent blend to isolate a liquid, oily product containing the molecules and essential oils and a liquid containing the essential oils.

20. A process for simultaneously extracting at least a first and a second natural organic component from botanical material, comprising the steps of:

- (a) contacting the botanical material in a vessel with a blend of tetrafluoroethane and at least one organic solvent to simultaneously dissolve the first and the second natural organic components in the solvent blend;
- (b) removing the remaining botanical material from the solution of the first natural organic component, the second natural organic component, and the solvent blend; and
- (c) removing the solvent blend to isolate a liquid, oily product containing the first natural organic component which has antioxidant activity and a liquid product containing the second natural organic component which contains essential oils wherein the natural organic components are improved over natural components extracted in the absence of the organic solvent.

21. The process of claim 20, wherein the liquid, oil product containing the first natural organic component is readily soluble in an edible oil.

22. The process of claim 20, wherein the botanical material is a member of the family

Labiatae.

23. The process of claim 22, wherein the member of the family Labiatae is *Rosemarinus officinalis*.
24. A preservative for foods and animal feedstuffs, comprising a mixture of the liquid, oily product obtained from the process of claim 20 and an edible oil.
25. An orally administered antioxidant for humans and animals, comprising a mixture of the liquid, oily product obtained from the process of claim 20 and an edible carrier.
26. An essential oil product comprising the liquid product containing the essential oils obtained from the process of claim 20.

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